Bangladesh National Report to the Scientific Committee of the Indian Ocean Tuna Commission, 2026

Department of Fisheries (DoF)
Ministry of Fisheries and Livestock
Bangladesh

Bangladesh National Report to the Scientific Committee of the Indian Ocean Tuna Commission, 2026

Department of Fisheries (DoF)
Ministry of Fisheries and Livestock
Bangladesh

INFORMATION ON FISHERIES, RESEARCH AND STATISTICS

In accordance with IOTC Resolution 15/02, final scientific data for the previous year was provided to the IOTC Secretariat by 30 June of the current year, **for all fleets other than long line**	Yes 02/07/2026
Similarly, in accordance with IOTC Resolution 15/02, provisional **long line data** for the previous year was provided to the IOTC Secretariat by 30 June of the current year. **REMINDER:** Final long line data for the previous year is due to the IOTC Secretariat by 30 Dec of the current year	Yes 02/07/2026
If no, please indicate the reason(s) and intended actions:	

CONTENTS

Sl.		Topic	Page
		EXECUTIVE SUMMARY	5
1		BACKGROUND/GENERAL FISHERY INFORMATION	6
2		FLEET STRUCTURE	7
3		CATCH AND EFFORT (BY SPECIES AND GEAR)	10
4		RECREATIONAL FISHERY	14
5		ECOSYSTEM AND BY CATCH ISSUES	14
	5.1	SHARKS	15
	5.2	SEABIRDS	16
	5.3	MARINE TURTLES	16
	5.4	OTHER ECOLOGICALLY RELATED SPECIES	16
6		NATIONAL DATA COLLECTION AND PROCESSING SYSTEMS	16
7		NATIONAL RESEARCH PROGRAMS	18
8		IMPLEMENTATION OF SCIENTIFIC COMMITTEE RECOMMENDATIONS AND RESOLUTIONS OF THE IOTC RELEVANT TO THE SC	19
9		LITERATURE CITED	23

Executive Summary

Following the settlement of maritime boundaries, Bangladesh has entered a new phase in managing its marine fisheries across 118,813 km² of the Bay of Bengal. The Government is prioritising the sustainable management of tuna and tuna-like fisheries within its Exclusive Economic Zone (EEZ) and adjacent waters, guided by science-based management and alignment with IOTC conservation and management measures. Although industrial tuna fishing has not yet commenced, the Department of Fisheries (DoF) is advancing research, pilot operations, and capacity building to support future pelagic development.

During 2024-25, total marine production reached **568,312 tonnes**, with **116,651 tonnes** from **232 industrial** trawlers and **451,661 tonnes** from about **25,718 artisanal** vessels. Tunas and tuna-like species contributed approximately **6,259 tonnes** from industrial and **20,364 tonnes** from artisanal catches. The main species include longtail, kawakawa, skipjack, frigate, and bullet tunas, along with mackerels and billfish. To reduce pressure on demersal resources, several bottom trawlers have been converted to mid-water trawlers targeting pelagic species.

Bangladesh has modernised its monitoring, control, and surveillance (MCS) framework under the **Marine Fisheries Act 2020**, **Marine Fisheries Rules 2023** and **Technical guidelines for marine fisheries management and harvesting 2023** introducing vessel registration, digital licensing, voyage-based logbooks, and observer programmes. Coordination among the DoF, Bangladesh Navy, and Coast Guard ensures effective enforcement and surveillance. The annual **58-day fishing closure** (15 April-11 June) continues to protect spawning stocks and support stock recovery.

To combat Illegal, Unreported, and Unregulated (IUU) fishing, Bangladesh is implementing its **National Plan of Action to Prevent, Deter and Eliminate IUU Fishing (NPOA-IUU),** developed in line with the FAO IPOA-IUU. The country has ratified the **FAO Port State Measures Agreement (PSMA)** and is strengthening port inspection and monitoring procedures to prevent landings of IUU-caught fish in accordance with FAO and IOTC guidelines. These combined initiatives, along with improved vessel monitoring and data verification, are enhancing transparency, compliance, and governance across the marine sector.

Ecosystem protection and bycatch management remain priorities. Bangladesh continues to strengthen measures to safeguard sharks, rays, turtles, and other vulnerable species in line with FAO and IOTC guidelines. The use of Turtle Excluder Devices (TEDs) on shrimp trawlers is compulsory, and discarding of bycatch at sea is prohibited, supporting the protection of marine turtles and compliance with IOTC guidelines. Scientific research and collaboration continue to expand. The ***R.V. Meen Sandhani*** has conducted 62 surveys since 2016, while the ***R.V. Dr. Fridtjof Nansen*** completed its second ecosystem survey (leg 2.5) in 2025, providing updated data on fish stocks, oceanographic conditions, and ecosystem dynamics. These findings are guiding ongoing policy reform and long-term planning for future offshore and pelagic fisheries.

Bangladesh has recently initiated formulation of ‘‘High Seas Fisheries Guidelines, 2026” in order to ensure regulated and sustainable fishing aligned with IOTC guidelines. Through continuous legal reform, improved data systems, and strengthened IUU control, Bangladesh is establishing a credible, transparent, and sustainable management framework for its tuna and tuna-like resources, contributing to responsible utilisation and regional cooperation under the IOTC.

1. BACKGROUND/GENERAL FISHERY INFORMATION

Marine resources constitute a vital component of Bangladesh's economic growth, food security, and employment generation. Recognising their significance, the Government of Bangladesh has prioritised the sustainable utilisation of these resources at the highest policy levels. Marine fisheries provide livelihoods for millions of coastal households and generate multiplier employment opportunities in associated activities such as processing, marketing, and distribution. The country possesses a 710 km-long coastline, extending from Teknaf in the southeast to Satkhira in the southwest. Following the resolution of maritime boundary disputes with Myanmar and India through the verdicts of the International Tribunal for the Law of the Sea (ITLOS) and the International Court of Arbitration (ICA), Bangladesh secured sovereign rights over 118,813 sq. km of the Bay of Bengal for exploration, exploitation, and management of living and non-living resources (DoF, 2015).

Bangladesh's marine ecosystem supports considerable biodiversity, including 475 species of finfish, 36 species of shrimp, 5 species of lobster, 12 species of crab, 33 species of sea cucumber, and numerous other aquatic organisms. Within the sector, the artisanal sub-sector plays a dominant role, contributing approximately 79.47% of total marine fisheries capture, primarily targeting hilsa, bombay duck, ribbonfish, croakers, catfish, sardines, and threadfin breams. The industrial sub-sector accounts for 20.53% of marine production, focusing largely on demersal and pelagic finfish and shrimp (DoF, 2025).

Since 2016, under the supervision of the Department of Fisheries, continuous survey operations have been conducted in the continental shelf areas of the Bay of Bengal (10–200 meters depth) using the research vessel R.V. Meen Sandhani. These surveys focus on determining the species composition, geographical distribution, and relative abundance of shrimp and demersal fish resources. To date, the surveys have identified 458 species of finfish, 36 species of shrimp, along with other marine organisms. Between 2016 and 2025, a total of 62 survey cruises were completed. Based on data generated from these cruises, as well as analyses of industrial and artisanal landing records, two stock assessment reports have been published. These reports provide detailed analyses of eight key stocks, together with an overall assessment of finfish and shrimp resources. It is important to note that R.V. Meen Sandhani has limitations in conducting acoustic surveys required for estimating the stock of small pelagic species. The vessel is not equipped with modern research instruments such as specialized fishing gears, scientific sonar, and echo-sounders. Furthermore, it lacks the operational capacity to conduct surveys in waters deeper than 200 meters across all seasons. As a result, Bangladesh requires a large-scale, all-weather survey vessel to adequately assess tuna, other pelagic stocks, and to undertake ecosystem-based surveys.

In this context, following a request from the Government of Bangladesh, the R.V. Dr. Fridtjof Nansen, operated with the support of the Food and Agriculture Organization (FAO), conducted a Fisheries and Ecosystem Survey in Bangladesh's marine waters in 2018. Again in 2025 another survey by R.V. Dr. Fridtjof Nansen represents a significant milestone in the history of marine resource management in Bangladesh. The scientific data generated from this survey will directly contribute to fisheries conservation, sustainable harvesting, climate change adaptation, and marine environmental protection, while also informing the development of national policies. Additionally, the survey will strengthen the technical capacity of Bangladeshi scientists and foster international cooperation. Habitat mapping across varying depths and environmental conditions will be undertaken, providing critical insights for species conservation and fisheries management.

Over the past decade, trawl-based industrial fisheries have contributed an average of 17.93% of total marine landings, while artisanal small-scale fisheries have accounted for approximately 82.07%. Despite this dominance, sustainable harvest levels remain poorly defined due to limited data availability. Socioeconomic vulnerabilities and the absence of alternative livelihoods for coastal communities exacerbate pressures on fish stocks. While management measures have predominantly targeted the industrial fleet, artisanal fisheries remain insufficiently regulated. Consequently, excessive effort—particularly the increasing use of fine-mesh nets—has resulted in growth overfishing, high levels of juvenile catch, and a decline in stock abundance, thereby undermining sustainability.

Marine capture fisheries in Bangladesh are multispecies and complex in nature. They currently contribute 11.12% of total national fish production (DoF, 2025). In recognition of challenges facing the sector, the Government has introduced a range of regulatory measures, including:

- Conversion of bottom trawlers to mid-water trawlers;
- Suspension of new trawler registrations;
- A 58-day seasonal fishing ban (15 April–11 June); and
- A 22-day hilsa fishing ban during the peak breeding period.

In terms of pelagic resources, several tuna species are harvested, predominantly neritic varieties. These include frigate tuna (*Auxis thazard*), bullet tuna (*Auxis rochei*), kawakawa (*Euthynnus affinis*), bigeye tuna (*Thunnus obesus*), longtail tuna (*Thunnus tonggol*), and skipjack tuna (*Katsuwonus pelamis*). Yellowfin tuna (*Thunnus albacares*) occurs incidentally in the catch. Smaller tunas such as *K. pelamis*, *T. tonggol*, and *A. rochei* are mainly recorded in industrial trawl logbooks, whereas *E. affinis*, *A. thazard*, and *T. obesus* are commonly captured as bycatch in artisanal gillnet and hook-and-line fisheries. Mackerel species also represent an important component of landings. The Indo-Pacific king mackerel (*Scomberomorus guttatus*) and narrow-barred Spanish mackerel (*Scomberomorus commersoni*) are extensively caught by both industrial trawlers and mechanized artisanal vessels. In addition, several tuna-like billfishes—including swordfish (*Xiphias gladius*), Indo-Pacific sailfish (*Istiophorus platypterus*), black marlin (*Istiompax indica*), and wahoo (*Acanthocybium solandri*)—have been reported in both artisanal and industrial fisheries.

2. FLEET STRUCTURE

The marine fisheries sector of Bangladesh is broadly categorized into two sub-sectors: industrial and artisanal fisheries. According to the Department of Fisheries (DoF, 2025), the country's fishing fleet comprises 232 industrial fishing trawlers and 25718 artisanal boats.

The artisanal sub-sector primarily employs simple fishing gears such as gillnets, set bag nets, trammel nets, and hooks and lines, operated by both mechanized and non-mechanized boats. Non-mechanized Small artisanal boats, typically manned by 3–5 fishers, engage in daily fishing activities close to the coastline in very shallow waters. In contrast, artisanal boats with carrying capacity around >15 gross tonnage are usually equipped with ice storage facilities and operate for 5–10 days within the 40-meter depth contour, employing 10–25 fishers depending on the type of gear used.

The industrial fishing fleet of Bangladesh is composed of two main categories: freezer trawlers and iced (wooden-hull) trawlers, operating within the country's Exclusive Economic Zone (EEZ). Freezer trawlers are further divided into shrimp trawlers and fish trawlers, the latter comprising both demersal

and mid-water trawlers. While wooden-hull trawlers are fitted with chilling facilities, almost all steel-hull trawlers are equipped with freezing facilities to preserve their catch. In terms of vessel capacity, wooden-hull trawlers range from 56–148 GT, with lengths of 18.5–26.5 meters and engine power between 420–600 BHP (mostly around 500 BHP). Steel-hull trawlers are larger, ranging from 251–668 GT, with lengths of 34–54 meters and engine power between 716–1850 BHP, predominantly within the 500–1000 BHP range. Industrial trawlers primarily target demersal fish and shrimp, though mid-water trawlers have recently been introduced to harvest small pelagic species. Most fish trawlers employ high-opening bottom trawls deployed from the stern, with cod-end mesh sizes of 60 mm and head-rope lengths ranging from 18–32 meters. These trawlers are generally equipped with modern navigation, communication, and fish-finding technologies. By regulation, industrial trawl fishing is restricted to areas beyond the 40-meter depth contour.

Operational practices vary by vessel type: wooden-hull trawlers typically undertake 15-day fishing trips, while steel-hull vessels operate for up to 30 days per trip. On average, 5–6 hauls are conducted daily, each lasting 3.0–3.5 hours, though the actual number of hauls and fishing days depends on weather conditions, vessel seaworthiness, and mechanical performance (Barua et al., 2014). Shrimp trawlers generally have capacities of 150–250 GT, with engine power ranging from 500–900 BHP, and may also operate for up to 30 days per trip.

Table 1(a): Number of vessels operating in the IOTC area of competence, by gear type and size

Fishing type	2020-21	2021-22	2022-23	2023-2024	2024-2025
Industrial trawl fishery: Number of Vessels					
a) Shrimp Trawler	27	32	33	33	28
b) Fish Trawler	184	199	199	204	204
Sub-total	**211**	**231**	**232**	**237**	**232**
Artisanal: Number of Vessels					
a) Mechanized boat (MB)	32859	32859	29358	28575	25718
b) Non-Mechanized boat (NMB)/Artisanal	34810	34810	-	-	-
Sub-total	67669	67669	29358	28575	25718
Artisanal Gear Type: Number of Vessels					
a) Gill net fishery	37190	37190	25992	25210	23101
b) Set Bag net (SBN) fishery	20750	20750	2932	2929	2397
c) Long line (Hooks & Lines) fishery	3225	3225	93	94	94
d) Trammel net fishery	131	131	-	-	-
e) Other gear fishery	6373	6373	341	342	126
Sub-total	**67669**	**67669**	**29358**	**28575**	**25718**

Table 1(b): National fleet structure based on 2024-25 report

Industrial Fishing vessel over 24 m					Artisanal Fishing vessel below 24 m				
Type of trawler	Number	Gear used	Species caught	Tuna and Tuna-like fish	Vessel type	Number	Gear used	Species caught	Tuna and tuna-like fish caught
Shrimp trawler (steel hull of 30-43 m LOA, 450-750 BHP)	28	shrimp trawl	Shrimp and fish as bycatch	no	Mechanized	25718	Gill net, MSBN[1] Bottom hook and line for Jew fish	Hilsa, different species of shrimp, Jew, pomfret, anchovies, ribbon, etc.	Neritic tuna and tuna-like fish are caught in the Hilsa gillnet, which is not estimated
Fish trawler (steel and wooden hull 24-54 m LOA, 520-1450 BHP)	83	fish trawl	Mixed species, mainly sardines, croakers, catfish,	about 5-6 % of tuna and tuna-like	-	-	-	-	-
Midwater trawler (steel hull, 36-45m LOA, 1050-1850 BHP)	121	Midwater trawl	Mixed species, mainly sardines, croakers, catfish, redfish, ribbon fish, etc.	about 7-8% of tuna and tuna-like fish	-	-	-	-	-

[1] Marine Set Bag Net

Table 1(c): Gear and their operation

Name	Species caught	Depth of operation
Trawl	Tiger and other penaeid shrimps, Catfish, Jew fish, ribbon fish, mackerels, scads etc	40-100 m
Gill net	Hilsa, Indian salmon, mackerels, croaker, grunters etc	8-10 m (fixed), up to 30 m (drift nets) up to 80 m (bottom set gill net)
MSBN	Penaeid shrimps, anchovies, bombay duck, clupeids, sea perch	10-30 m
Bottom long line	Croaker (Sciaenidae), catfish (Arridae), Sillago sp. (Sillaginidae)	10-30 m
Other's gear	Small penaeid shrimps, clupeids, anchovies, croaker	8-10 m

3. CATCH AND EFFORT (BY SPECIES AND FISHERY)

The marine fishing sector is governed by the Marine Fisheries Act, 2020, Marine Fisheries Rules, 2023, Technical guidelines for marine fisheries management and harvesting 2023 and by different harvesting policies. Mainly commercial/industrial trawlers and artisanal fishing fleet contribute national marine production. About 232 Industrial vessels and around 25,718 artisanal boat fishing in Bangladesh maritime water. No fishing trawler is allowed in fishing without valid license in Bangladesh marine waters. Artisanal fishing boats required permission letter according to recent act and rules. The trawlers are allowed to catch fish/shrimp in area of no shallower than 40 m depth. Artisanal fishing boats are allowed to fishing within 40 m depth. Industrial fishing fleet has mandatorily to take sailing permission (SP) from Marine Fisheries Office (MFO) under Department of fisheries (DoF) by submitting supporting documents and stipulated fee. Artisanal boats have obligation to take permission letter for three (03) years from MFO by submitting required documents and fees, And subject to fulfillment of the conditions, the permit should be renewed every three years.

Bangladesh has initiated the formulation of the "High Seas Fisheries Guidelines, 2026" to promote responsible and sustainable high seas fishing in accordance with relevant IOTC Conservation and Management Measures (CMMs). The proposed guidelines will address fishing vessel authorization, monitoring, control and surveillance (MCS), catch reporting, scientific data collection, prevention of Illegal, Unreported and Unregulated (IUU) fishing, and bycatch mitigation. This initiative aims to strengthen national regulatory capacity and ensure sustainable management of tuna and tuna-like fisheries in compliance with applicable international fisheries obligations.

Both census and sampling methods are used for marine fisheries data collection in Bangladesh. A census approach is used in industrial fishing data collection, where a stratified random sampling (sampling in space and sampling in time) technique is used in a landing centre-based artisanal data collection system. In industrial fishing, submission of the catch log and tally sheet of the previous trip is a prerequisite during application for sailing permission. Vessels are randomly inspected by personnel of the MFO of DoF before and after completion of the trip as a shore-based inspection. Artisanal landings are sampled at about 170 landing centres in 14 coastal districts. DoF appointed 195 enumerators, every alternate day collect 15 fishing units (boat and gear combination) based catch-effort data using the Kobo Tool box platform, maintaining a standard data collection protocol. The Monitoring, Control, and Surveillance (MCS) activities for industrial and artisanal fishing fleets are well monitored by the patrolling vessels of the Bangladesh Navy (BN) and the Bangladesh Coast Guard (BCG). Recently, personnel from the MFO of DoF have been on board as observers in the patrolling vessel of BN and working in concert with them. As the demersal fishes are under pressure, the focus of fishing towards pelagic resources is increasingly being observed after the conversion of bottom water trawlers into midwater trawlers.

Table 2(a): Fish Production 2020-21 to 2024-25

Year	Marine production (MT)	No of trawlers	Industrial (MT)	No of Boats	Artisanal (MT)
2020-21	681239	211	119121	M 32859, NM 34810	562118
2021-22	706030	231	137170	M 32859, NM 34810	568860
2022-23	679385	232	146037	M 29358, NM 0	533348
2023-24	628623	237	114804	M 28575	513819
2024-25	568312	232	116651	M 25718	451661

*M-Mechanized, *NM-Non mechanized

Table 2(b): Industrial Fisheries species-wise catch (MT)

Species/Group	2020-21	2021-22	2022-23	2023-24	2024-25
Shrimp	3069	3301	2970	1954	3022
Hilsa	7781	11046	8138	2368	1790
Tuna & tuna –like fish	7893	12102	5597	6204	6259
Sardine	33869	37720	50783	23065	28564
Bombay duck	6936	2787	1444	1617	2644
Indian Salmon	0	0	0	0	0
Pomfret	1355	1137	1725	944	936
Croaker	15385	5080	5665	5335	4120
Cat fish	5116	4198	4928	5646	2524
Sharks and Rays	5400	3915	294	166	83
Others	32317	55884	64493	67505	66709
Total	**119121**	**137170**	**146037**	**114804**	**116651**

Table 2(c): Artisanal Fisheries species-wise catch (MT)

Species/Group name	2020-21	2021-22	2022-23	2023-24	2024-25
Shrimp	43228	44305	43793	24315	48718
Hilsa	305812	310825	291874	278550	249543
Tuna & tuna–like fish	14237	9047	9454	8289	20364
Sardine	650	712	717	638	2747
Bombay duck	64986	79873	80498	76604	59251
Indian Salmon	163	199	200	115	93
Pomfret	7859	10343	10327	10532	8665
Jew fish	33280	36276	37089	55351	30729
Cat fish	7083	10368	10377	12353	11367
Shark & Ray	2828	3102	3057	2785	1820
Other fish	81992	63810	45962	44286	18364
Total	**562118**	**568860**	**533348**	**513819**	**451661**

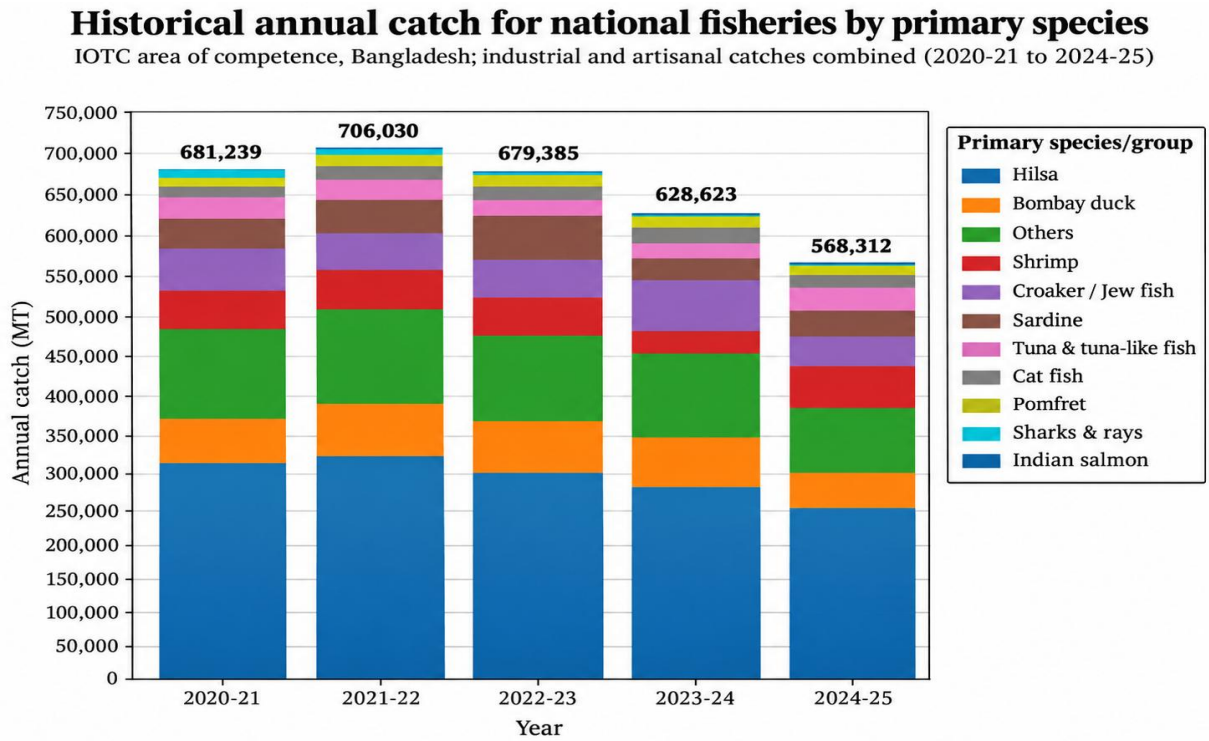


Figure 1. Historical annual catch for the national fisheries by primary species, for the IOTC area of competence for the entire history of the fisheries

Figure 2a: Distribution of fishing effort by national fishery in the IOTC area of competence. (most recent year e.g., 2025)

Figure 2a.I: Fishing effort (Coastal fishery)

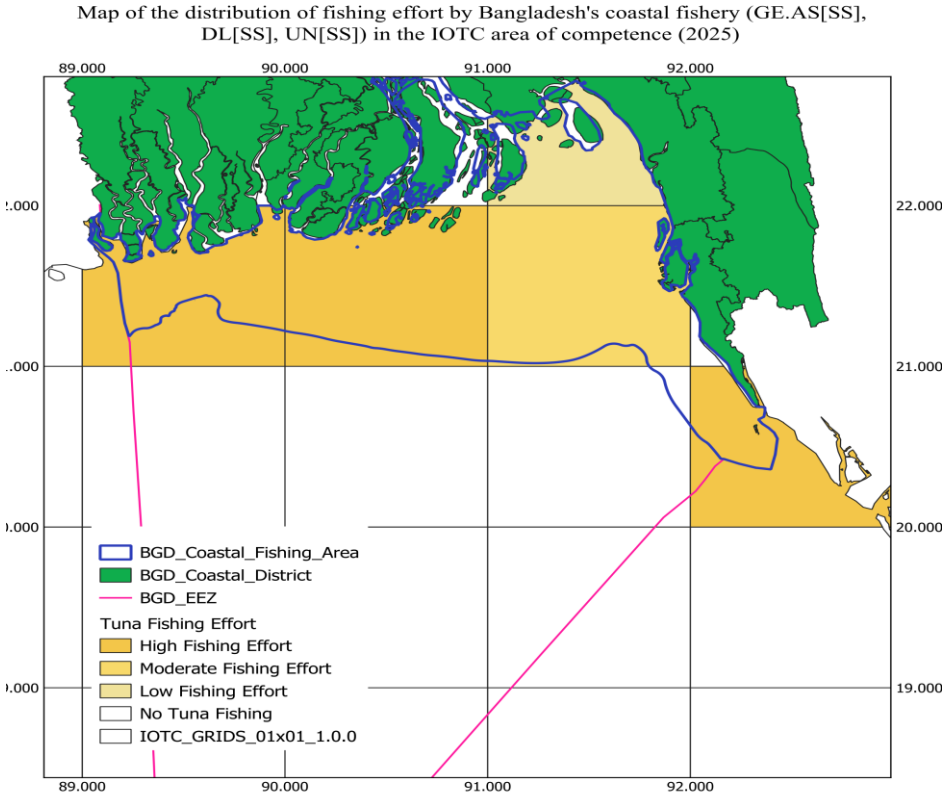


Figure 2a. II: Fishing effort (surface fishery)

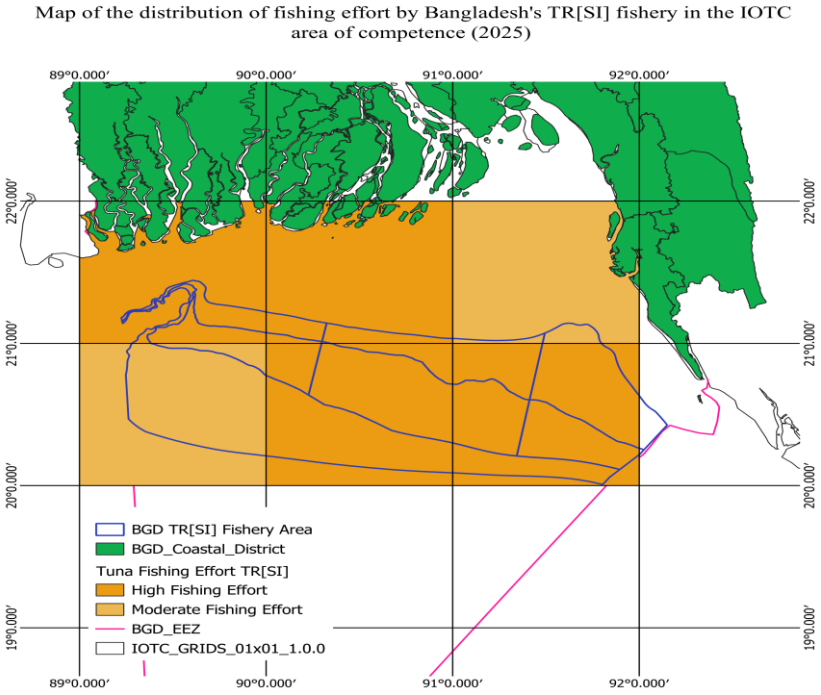


Figure 2b. Distribution of fishing effort, by national fishery in the IOTC area of competence (average of the 5 previous years e.g., 2021–2025)

Bangladesh has not yet established a systematic mechanism for collecting geo-referenced fishing effort data, and historical spatial fishing effort records for 2021–2025 are unavailable. However, Bangladesh has recently initiated efforts to establish a systematic framework for collecting geo-referenced fishing effort data for coastal and surface fisheries, with the aim of improving data availability and compliance with IOTC reporting requirements.

Figure 3a. Distribution of fishing catch, by species for the national fisheries, in the IOTC area of competence (most recent year e.g., 2025)

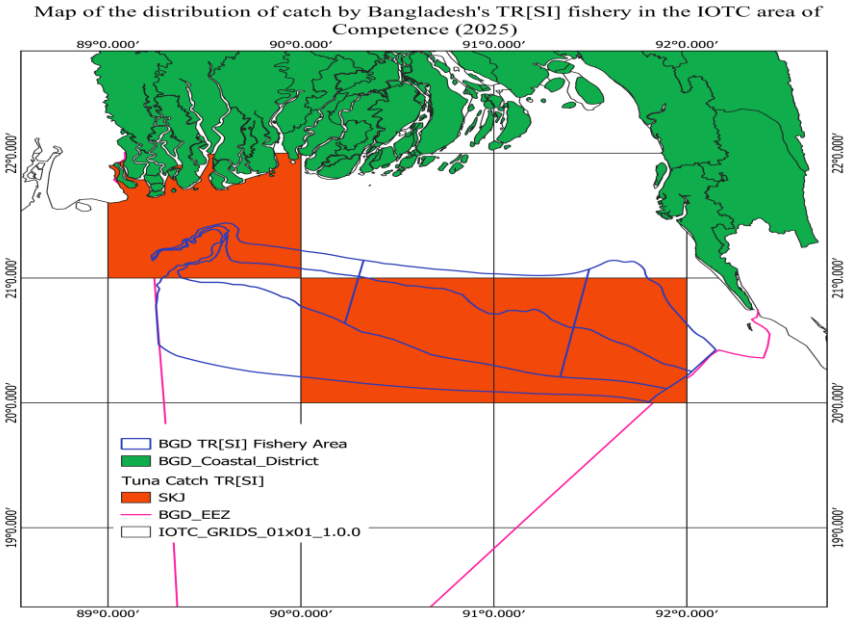
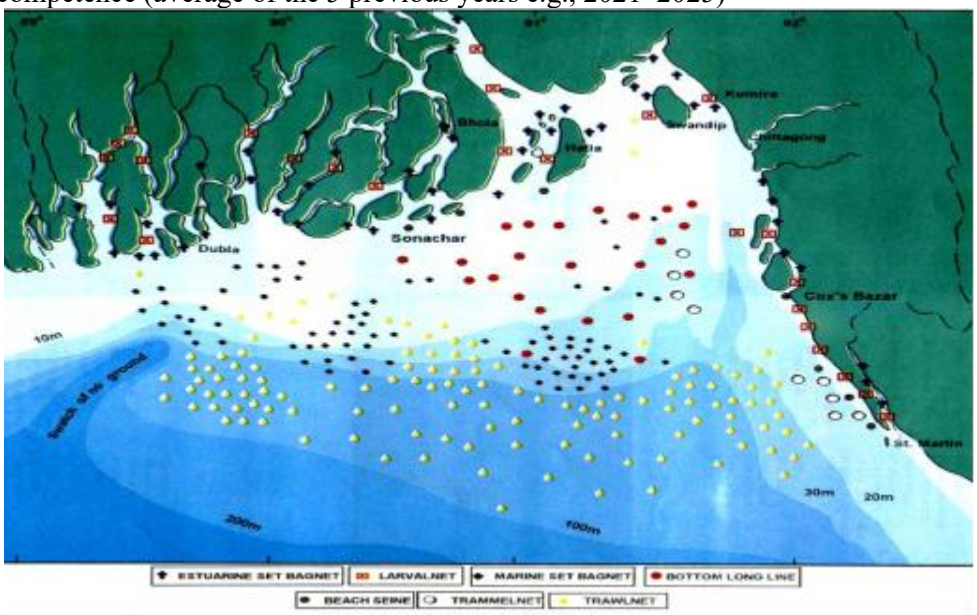


Figure 3b: Distribution of fishing catch, by species for the national fisheries, in the IOTC area of competence (average of the 5 previous years e.g., 2021–2025)



4. RECREATIONAL FISHERY

There is no record of recreational fishery in Bangladesh marine waters.

5. ECOSYSTEM AND BY CATCH ISSUES

The Bay of Bengal ecosystem supports a wide range of biodiversity, including commercially important tuna and tuna-like species as well as numerous vulnerable species. The coastal zone of Bangladesh is categorized as tropical maritime climate. Four distinct seasonal weather patterns including dry-winter, pre-monsoon, monsoon and post-monsoon period are prevailed. Precipitation continues from late May up to mid of October. The protection of environment is to key to mitigation of climate change relating planning. The marine environment is a huge carbon store. It will continue to be carbon store when the integrity of the ocean environment is maintained in terms of biodiversity and all the endemic flora and fauna is able to survive. In this way it can absorbs shocks to changes its ecosystem. Pollution controls, maintaining the unique composition of flora and fauna at all levels and depth are imperative of this condition. So, responsible ecosystem-based fisheries management is the key to climate change adaptation and mitigation measure in fisheries sector.

In the shrimp trawl fishery of Bangladesh, finfish species constitute the major portion of non-target catch, accounting for around 35–40% of the total catch (Hoq et al., 2013). In earlier years, the level of discarded finfish was much higher, rising up to nearly 70% of the catch (Lamboeuf, 1987). To address this, regulatory measures were introduced, including a ban on discarding bycatch at sea and the enforcement of prescribed mesh sizes for trawlers, gillnets, and set bag nets. At present, there is no discard of fish in the strict sense, as almost all species caught are landed and utilized in some form. The discarding of trash fish or bycatch at sea is strictly prohibited under the *Technical Guidelines for Marine Fisheries Management, 2023*. A key driver of this change is the development of a strong market for low-priced fish, which are now processed into dried products or used as a valuable protein source in the poultry and aquaculture feed industries, ensuring that even low-value species are put to use rather than wasted

Major bycatch species of concern: The major bycatch species recorded or expected in Bangladesh related to tuna fisheries include- Sharks: Silky shark (*Carcharhinus falciformis*), oceanic whitetip shark (*Carcharhinus longimanus*), thresher sharks (*Alopias* spp.), hammerheads (*Sphyrna* spp.) mobulid rays. Olive ridley (*Lepidochelys olivacea*), green turtle (*Chelonia mydas*), hawksbill turtle (*Eretmochelys imbricata*), and leatherback turtle (*Dermochelys coriacea*).
- Marine mammals: Rare but occasional entanglements of dolphins have been reported in drift gillnets.

- Other finfish: Billfishes (sailfish, marlins), dolphinfish, barracuda, and king mackerel.

5.1. Sharks

Gillnets are the predominant tuna fishing gear in Bangladesh, accounting for the majority of tuna landings but also presenting high risks of bycatch, particularly sharks and turtles. Small-scale longlines and handlines may also capture sharks, billfish, and turtles. There is no fishing zone demarcation for shark fisheries. Artisanal fishers are allowed to fish from the shoreline to 40 m depth zones, and industrial fish trawlers are allowed to fish beyond 40 m depth zones. Sharks are mainly caught by artisanal fishery with drift gill nets, used for catching hilsa and Indian salmon, set bag nets, long lines and trammel nets within 10-80 m depth ranges. Shark products are exported, and foreign currency is earned.

The Bangladesh Forest Department has developed a National Conservation Strategy (NCS) for Sharks and Rays, which is currently in the finalisation stage. The strategy aims to guide conservation, management, and sustainable use of sharks and rays in line with national laws, FAO's IPOA-Sharks, and international obligations under CITES and CMS. It emphasises reducing bycatch, improving data collection, strengthening institutional capacity, and raising awareness among stakeholders. Implementation is expected to begin soon, complementing the National Plan of Action for conservation and management of sharks and rays (2023–2027) approved by the Government.

5.1.1. NPOA sharks: Sharks and rays are not primary target species in Bangladesh fisheries but constitute significant incidental catches in small-scale fisheries, particularly during operations targeting hilsa and Indian salmon with drift gillnets, bag nets, trammel nets, and hook-and-line gear. The majority of individuals landed are small-sized due to the mesh and gear design. Seasonal peaks in shark catches occur between October and March, especially from January to March, with reduced landings from July to September owing to rough sea conditions. Landings are recorded along the entire Bangladesh coast, with major centers at Cox's Bazar, Teknaf, Chattogram, Khulna, Bagerhat, Dublar Char, Kuakata, Patharghata, and Barisal, and fishing grounds including the South Patches, Middle Ground, and Swatch of No Ground.

To address bycatch and conservation issues, Bangladesh developed its National Plan of Action (NPOA) for the Conservation and Management of Sharks and Rays, first drafted in 2014 under the FAO-BOBLME project and subsequently updated through a Working Group led by the Department of Fisheries (2021–2023). The plan aligns with the FAO IPOA-Sharks and focuses on:

- Clarifying state responsibilities,
- Awareness-building for fishers, traders, and stakeholders,
- Institutional capacity development (DoF, BFRI, BFDC, Customs, DoE, BFD),
- Strengthening data collection and monitoring, and
- Formulating conservation and management measures.

While progress has been made, the bycatch of sharks and rays remains a concern due to gear selectivity and market demand for meat and fins. Bangladesh is working towards improving monitoring, enhancing capacity, and promoting awareness to ensure compliance with national regulations and international commitments under IOTC and CITES.

Shark finning regulation: All sharks and rays found in the EEZ of Bangladesh are listed as Schedule-1 and Schedule-2 under the Wildlife (Conservation and Security) Act, 2026 accordingly. Species under Schedule-1 are strictly protected; killing, landing, buying and selling, or eating are prohibited. Sharks finning on board is prohibited by the technical guidelines for marine fisheries management, 2023 (instruction no 12, by-catch management).

5.1.2. Blue shark: Blue Shark is listed in Schedule 2 under the Wildlife (Conservation and Security) Act, 2026. Species under Schedule-2 are strictly protected; killing, landing, buying and selling, or eating are permitted by the approval of the Department of Forest. There is no species-wise collection of data for sharks and rays in the national database, though there were some data on species-wise for a specific region in previous years, which was mentioned in previous year reports. However, a very small amount of sharks and rays in the industrial catch, which was 83 MT (0.07%) in the annual industrial catch of 2024-25. But, the artisanal landing of sharks and rays was 1820 MT (0.40%) of the total artisanal catch in 2024-25.

5.2 Seabirds: There are no long liners and purse seiners in Bangladesh. So, there were no reported instances of seabird interactions in any of the Bangladesh marine fisheries. Furthermore, there have been no reports of seabird occurrences from the gillnetters in the Bangladesh fishery.

5.3 Marine Turtles

All five species of marine turtles occurring in Bangladesh marine waters are listed in Schedule I of the Bangladesh Wildlife (Conservation and Security) Act, 2026. The Turtle Extruder Device (TED) is used in shrimp trawlers to let the turtle out during bottom fishing. TED is mandatory for all shrimp trawlers by the Marine Fisheries Rules, 2023 (rule no. 10(17)). Demersal fish trawlers are being modified to Mid-water trawlers gradually. It is necessary to introduce a provision for reporting the catch of turtles in fish trawl and gillnet fisheries, and take measures to reduce the catch and survival of turtles.

5.4 Other ecologically related species (e.g., cetaceans, mobulid rays, whale sharks)

Other ecologically related species (cetaceans, mobulid rays, whale sharks) shall not be hunted, killed, or captured according to the Bangladesh Wildlife (Conservation and Security) Act, 2026. For the protection and conservation of marine mammals and other marine animals, it is well noted in the Marine Fisheries Rules, 2023 (rule no. 10(21 & 23)) and the technical guidelines for marine fisheries management, 2023 (instruction no 12, by-catch management).

6. NATIONAL DATA COLLECTION AND PROCESSING SYSTEMS

6.1. Log sheet data collection and verification

IOTC species have been included in the fishing log sheet, and it is mandatory to submit the catch log, as well as the catch report of the previous trip, to the MFO of DoF for each voyage to obtain sailing permission for the next trip. Every industrial catch log, as well as catch report, has been checked and verified by inspectors.

6.2. Observer scheme

No conventional observer scheme has yet to onboard to monitor industrial fishing. The national fishing fleet is fully dependent on BN and BCG for fishery protection at sea. But, officers of the Marine Fisheries Office of DoF were on board as observers in the patrolling vessel of BN on a test basis. However, it was not continued after two operations in 2016. It was later carried out by a BCG ship in January 2019, but has since been suspended. Subsequently, from 2023 to 2025, the initiative was piloted across the industrial trawl fleet using a randomised selection process under the SCMFP. Under SCMFP, 45 numbers of onboard observers have been deployed. However, long line and purse seine are not operating yet in the fleet. The Observer programme is now incorporated into the legal framework under technical guidelines for marine fisheries management, 2023 (instruction no. 14(6)).

Vessel Monitoring System

There were 133 trawlers under the Vessel Monitoring System **(**VMS), but now a plan has been taken to implement a new VMS interface and hopefully, every industrial vessel and a specific percentage of mechanized fishing boats will come under the VMS/AIS system within short possible time by the finance of Sustainable Coastal and Marine Fisheries Project (SCMFP), DoF, Bangladesh. The Vessel Monitoring System is now incorporated into the legal framework under technical guidelines for marine fisheries management, 2023 (instruction no. 14 (1 & 2)).

Table 3. Annual observer coverage by operation, e.g., longline hooks, purse seine sets

Bangladesh does not operate industrial longline or purse seine fishing vessels and has not conducted any fishing operations on the high seas during the last five years (2021–2025). Consequently, observer coverage for longline and purse seine fishing operations is not applicable. However, Bangladesh has initiated efforts to develop high seas fisheries and has begun formulating the "High Seas Fisheries Guidelines, 2026" to promote responsible and sustainable fishing practices in accordance with relevant IOTC Conservation and Management Measures (CMMs).

Figure 4. Map showing the spatial distribution of observer coverage.

As Bangladesh had no industrial longline, purse seine, or high seas fishing operations during 2021–2025, a spatial observer coverage map for these fisheries is not applicable. Bangladesh has initiated efforts to develop high seas fisheries.

6.3. Port sampling programme

Marine Fisheries Survey Management Unit (MFSMU) of DoF has the mandate to conduct port sampling for artisanal fisheries. Artisanal port sampling has been conducted with the support of the SCMFP project through 200-plus landing sites along the 710 km coastline of Bangladesh.

Table 4. Number of Vessel Trips or Active Vessels Monitored, by Species and Fishery

The Marine Fisheries Survey Management Unit (MFSMU) of the Department of Fisheries (DoF) is responsible for port sampling of artisanal fisheries in Bangladesh. These activities facilitate the collection of vessel activity, fishing effort, catch composition, and species-specific landing data.

Table 5. Number of Fish Measured, by Species and Fishery

The Marine Fisheries Survey Management Unit (MFSMU) of the Department of Fisheries (DoF) conducts port sampling of artisanal fisheries in Bangladesh, including species identification and fish

length measurements. However, disaggregated records of the number of individual fish measured by species and fishery are not available.

6.4. Actions taken to monitor catches & manage fisheries for Striped Marlin, Black Marlin, Blue Marlin, and Indo-Pacific Sailfish

Not yet taken action to monitor catches and manage fisheries for Striped Marlin, Black Marlin, Blue Marlin and Indo-Pacific Sailfish.

6.5. Gillnet observer coverage and monitoring

More than 2.5 km long gill net has been banned by the legal framework under technical guidelines for marine fisheries management, 2023 (instruction no. 02 (IV & V)). Observing of gill nets is done by the inspectors at the Marine Fisheries Surveillance Check-post at Patanga, Chattogram.

6.6. Sampling plans for mobulid rays

On behalf of the Department of Forest, the Wildlife Conservation Society (WCS) of Bangladesh is doing the job.

6.7 Electronic Monitoring Standards

Bangladesh has not implemented an Electronic Monitoring System (EMS) under the IOTC Regional Observer Scheme (ROS). Furthermore, Bangladesh has not conducted high seas fishing operations during 2021–2025. Therefore, a fleet-level summary of Vessel Monitoring Plans is not applicable.

7. NATIONAL RESEARCH PROGRAMS

7.1. National research programs on blue shark

Not yet, but it has a plan to take in the near future.

7.2. National research programs on Striped Marlin, Black Marlin, Blue Marlin and Indo-pacific Sailfish

Not yet, but it has a plan for the future.

7.3. National research programs on sharks

Various research programs on sharks have been sporadically taken up by various organisations, and now have taken the initiative by the DoF to articulate them in a coordinated way.

7.4. National research programs on oceanic whitetip sharks

Not yet, but it has a plan for the future.

7.5. National research programs on marine turtles

Some research organisations have conducted research on turtles but not accumulated them, and plan has taken to articulate them in an organized way.

7.6. National research programs on thresher sharks

Not yet but it has plan to take in future.

Table 6. Summary table of national research programs, including dates.

Project title	Period	Countries involved	Budget total	Funding source	Objectives	Short description
Sustainable Coastal and Marine Fisheries Project (SCMFP)	2019-2025	Bangladesh	USD281.60M	World Bank and GoB	Strengthening capacity of national marine fisheries sector	Stock assessments, abundance/biomass estimation using research and survey vessel RV Meen Sandhani and various biological and oceanographic studies are being carried out.
Pilot Project for Extraction of Tuna and Similar Pelagic Fish in the Deep Sea	July 2020 to December 2026	Bangladesh	BDT61.7Cr	GoB	To create trained and skilled manpower for deep-sea tuna and homogeneous fishing	Under this pilot project to procure tuna long liners, tuna and similar fish will be caught from deep-sea and international waters.

8. Implementation of Scientific Committee Recommendations and Resolutions of the IOTC relevant to the SC.

8.1. Implementation of Scientific Committee Recommendations and IOTC Conservation and Management Measures

Bangladesh, as a Contracting Party to the Indian Ocean Tuna Commission (IOTC), remains committed to implementing relevant recommendations of the Scientific Committee (SC), particularly those arising from its 28th Session (SC28) in 2025, and applicable Conservation and Management Measures (CMMs). During the reporting period, the Department of Fisheries (DoF) continued to strengthen scientific data collection, fisheries monitoring, conservation of ecologically associated species, and sustainable management of tuna and tuna-like fisheries within Bangladesh's Exclusive Economic Zone (EEZ).

8.2. Scientific Data Collection and Statistical Reporting

In accordance with relevant SC recommendations and IOTC Resolutions 15/01 and 15/02, Bangladesh continued improving its catch and effort data collection and statistical reporting systems. Industrial fisheries data are collected through vessel logbooks and landing records, while artisanal fisheries data are obtained through standardized landing-centre-based sampling supported by digital data collection tools. During FY 2024–25, total marine fisheries production was 568,312 MT, including 26,623 MT of tuna and tuna-like species. Further improvements are needed in species-specific reporting, geo referenced catch and effort data, size-frequency information, and data validation.

8.3. Scientific Observer Coverage and Electronic Monitoring

Bangladesh acknowledges the importance of scientific observer coverage and electronic monitoring under Resolutions 25/06 and 23/08. Fisheries monitoring, vessel inspection, and catch verification activities are conducted in coordination with relevant national authorities. However, a fully

operational Electronic Monitoring System (EMS) under the IOTC Regional Observer Scheme has not yet been established. Strengthening scientific observer arrangements, standardized bycatch monitoring, and electronic reporting remains a national priority.

8.4. Conservation of Sharks, Rays, Marine Turtles and Other Vulnerable Species

Regarding ecosystem and bycatch conservation, Bangladesh continues to strengthen measures for the protection of sharks, rays, marine turtles, and other vulnerable species, consistent with relevant IOTC Resolutions, including 12/04, 25/08, 25/09, and 26/03. National legislation provides protection for designated threatened species, while initiatives concerning a National Plan of Action for Sharks and Rays are being pursued. The use of Turtle Excluder Devices (TEDs) is mandatory in shrimp trawl fisheries. Further efforts are required to improve species identification, bycatch documentation, and safe handling and release practices.

8.5. Scientific Research, Fisheries Resource Surveys and Stock Assessment

Scientific research and fisheries resource assessments have continued through 62 survey cruises conducted by *R.V. Meen Sandhani* during 2016–2025 and ecosystem surveys undertaken by *R.V. Dr. Fridtjof Nansen* in 2018 and 2025. These activities have contributed to improved understanding of marine fisheries resources, species distribution, abundance, and ecosystem conditions in the Bay of Bengal. Bangladesh recognizes the need to expand tuna-focused research, biological data collection, stock assessment, and ecosystem-based fisheries management.

8.6. Monitoring, Control and Surveillance and Sustainable Fisheries Management

Bangladesh continues to strengthen Monitoring, Control and Surveillance (MCS) through vessel licensing, fishing authorization, catch documentation, and coordinated enforcement under the Marine Fisheries Act, 2020, and Marine Fisheries Rules, 2023. Although dedicated industrial tuna fishing and high-seas tuna fishing operations have not yet commenced, Bangladesh is progressively developing the scientific, technical, and institutional capacity required for responsible offshore fisheries development.

8.7. Future Priorities

Bangladesh has made progress in fisheries data collection, scientific research, conservation measures, and monitoring arrangements. Further priorities include improving scientific observer coverage, introducing electronic monitoring, strengthening species-specific catch and bycatch reporting, and expanding scientific research on tuna and associated species. Bangladesh remains committed to progressively implementing applicable IOTC Scientific Committee recommendations and CMMs through enhanced institutional coordination, capacity building, and international scientific cooperation.

Table 9. Scientific requirements contained in Resolutions of the Commission, adopted between 2012 and 2024.

Res. No.	Resolution	Scientific requirement	CPC progress
12/04	On the conservation of marine turtles	Paragraphs 3, 4, 6–10	TED is used in shrimp trawlers. Demersal fish trawlers are modifying to Mid-water trawlers gradually. It has planned to introduce provision of reporting the catch of turtle in fish trawl and gillnet fisheries and take measures to reduce catch and increase survival of turtle.
12/09	On the conservation of thresher sharks (family Alopiidae) caught in association with fisheries in the IOTC area of competence	Paragraphs 4–8	Thresher sharks are strictly protected under Schedule-1 of the Wildlife (Conservation and Security) Act 2026; killing, landing, buying and selling, or eating are prohibited.
13/04	On the conservation of cetaceans	Paragraphs 7– 9	No purse seine, so not applicable. In addition, cetaceans are protected under the Wildlife (Conservation and Security) Act 2026
13/05	On the conservation of whale sharks (*Rhincodon typus*)	Paragraphs 7– 9	No purse seine or FAD, so not applicable. In addition, whale sharks are protected under Schedule-1 of the Wildlife (Conservation and Security) Act 2026; killing, landing, buying and selling, or eating are prohibited.
13/06	On a scientific and management framework on the conservation of shark species caught in association with IOTC managed fisheries	Paragraph 5–6	NPOA for sharks has been developed.
15/01	On the recording of catch and effort by fishing vessels in the IOTC area of competence	Paragraphs 1–10	Have well-organized recording system includes catch log in industrial fishery and plan to introduce electronic system there. Simultaneously, it is now mandatory to maintain catch log in mechanized fishing boat and must submit them for taking sailing permission (SP) of next trip as per Marine Fisheries Act 2020.
15/02	Mandatory statistical reporting requirements for IOTC Contracting Parties and Cooperating Non-Contracting Parties (CPCs)	Paragraphs 1–7	Have statistical report of industrial, mechanical and artisanal fishing.
17/05	On the conservation of sharks caught in association with fisheries managed by IOTC	Paragraphs 6, 9, 11	NPOA for sharks has been developed.
18/02	On management measures for the conservation of blue shark caught in association with IOTC fisheries	Paragraphs 2-5	NPOA for sharks has been developed.
18/05	On management measures	Paragraphs	Not yet, but it has a plan to take action in the

Res. No.	Resolution	Scientific requirement	CPC progress
	for the conservation of the Billfishes: Striped marlin, black marlin, blue marlin and Indo-Pacific sailfish	7-11	future.
18/07	On measures applicable in case of non-fulfilment of reporting obligations in the IOTC	Paragraphs 1,4	As a CPC, Bangladesh trying to comply all reporting templates asked by IOTC.
19/01	On an Interim Plan for Rebuilding the Indian Ocean Yellowfin Tuna Stock in the IOTC Area of Competence	Paragraph 22	There are no Long Liner and Purse Seiner in Bangladesh, as well as, yet there is no YFT reported in trawl fishery.
19/03	On the Conservation of Mobulid Rays Caught in Association with Fisheries in the IOTC Area of Competence	Paragraph 11	Mobuild Rays are strictly protected under Schedule-1 of the Wildlife (Conservation and Security) Act 2026; killing, landing, buying and selling, or eating are prohibited. In addition, NPOA for shark is under development process, which may incorporate the IOTC requirements.
21/01	On an Interim Plan for Rebuilding the Indian Ocean Yellow Tuna Stock in the IOTC Area of Competence (if not provided under Res 19/01 above)	Paragraph 23	There are no Long Liner and Purse Seiner in Bangladesh.
23/07	On reducing the incidental bycatch of seabirds in longline fisheries.	Paragraphs 3–7	There are no Long Liner and Purse Seiner, as well as no high sea fishery in Bangladesh.
23/08	On electronic monitoring standards for IOTC fisheries	Paragraphs 3c	Not yet established.
25/06	On a regional observer scheme	Paragraph 12	There are no Long Liner and Purse Seiner, as well as no high sea fishery in Bangladesh.

9. LITERATURE CITED

Barua S 2019. Maximum sustainable yield (MSY) estimates for industrial finfish fishery in marine waters of Bangladesh using trawl catch log. Bangladesh Journal of Fisheries 31(2): 313–324.

Barua S, Karim E and Humayun NM 2014. Present status and species composition of commercially important finfish in landed trawl catch from Bangladesh marine waters. International Journal of Pure and Applied Zoology 2(2): 150–159.

Barua S, Magnusson A and Humayun NM 2018. Assessment of offshore shrimp stocks of Bangladesh based on commercial shrimp trawl logbook data. Indian Journal of Fisheries 65(1): 1–6. https://doi.org/10.21077/ijf.2018.65.1.61384-01.

DoF 2015. National Fish Week 2015 Compendium (in Bangla). Department of Fisheries, Ministry of Fisheries and Livestock, Government of Bangladesh. 160 p.

DoF 2019. National Fish Week 2019 Compendium (in Bangla). Department of Fisheries, Ministry of Fisheries and Livestock, Government of Bangladesh. 160 p.

DoF 2021. Yearbook of Fisheries Statistics of Bangladesh, 2020–21. Fisheries Resources Survey System (FRSS), Department of Fisheries, Ministry of Fisheries and Livestock, Bangladesh. Vol. 38, 138 p.

DoF 2022a. National Fish Week 2022 Compendium (in Bangla). Department of Fisheries, Ministry of Fisheries and Livestock, Government of Bangladesh. 160 p.

DoF 2022b. Yearbook of Fisheries Statistics of Bangladesh, 2021–22. Fisheries Resources Survey System (FRSS), Department of Fisheries, Ministry of Fisheries and Livestock, Bangladesh. Vol. 39, 139 p.

DoF 2023. Yearbook of Fisheries Statistics of Bangladesh, 2022–23. Fisheries Resources Survey System (FRSS), Department of Fisheries, Ministry of Fisheries and Livestock, Bangladesh. Vol. 40, 138 p.

DoF 2025. Yearbook of Fisheries Statistics of Bangladesh, 2024–25. Fisheries Resources Survey System (FRSS), Department of Fisheries, Ministry of Fisheries and Livestock, Bangladesh. Vol. 42, 145 p.

GoB 2026. Wildlife (Conservation and Security) Act, 2026 (Act No. 86 of 2026, in Bangla). Government of the People's Republic of Bangladesh. Bangladesh Gazette (Extraordinary), Dhaka, Bangladesh. pp. 16173–16332.

Hoq ME, Haroon AKY and Chakraborty SC 2013. Marine Fisheries of Bangladesh: Prospects and Potentialities. Support to Sustainable Management of the Bay of Bengal Large Marine Ecosystem (BOBLME) Project, Bangladesh Fisheries Research Institute, Bangladesh. SBOBLME Pub./Rep. 8, 92 p.

Lamboeuf K 1987. Bangladesh: Demersal Resources of the Continental Shelf. FAO/UNDP Marine Fisheries Research, Management and Development Project, Bangladesh. 26 p.

Roy BJ, Singha NK, Rahman MG, Ali SMH and Alam MF 2014. Abundance of tuna fish species in the Bay of Bengal of Bangladesh region. Indian Ocean Tuna Commission (IOTC), Fourth Working Party on Neritic Tunas (WPNT04), Phuket, Thailand, 29 June–2 July 2014. IOTC–2014–WPNT04–17, 13 p.